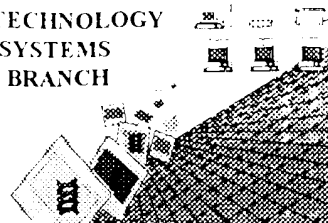


BIOTECHNOLOGY
SYSTEMS
BRANCH



RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/083,641
Source: OIP
Date Processed by STIC: 7/9/2002

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

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- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
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FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

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Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:
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OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/083,641

DATE: 07/09/2002

TIME: 14:04:28

Input Set : A:\Sequence Listing.txt

Output Set: N:\CRF3\07092002\J083641.raw

Does Not Comply
Corrected Diskette Needed

pp 2,6

```

3 <110> APPLICANT: HAYSTEAD, TIMOTHY A
5 <120> TITLE OF INVENTION: SMOOTH MUSCLE MYOSIN PHOSPHATASE ASSOCIATED KINASE
7 <130> FILE REFERENCE: 1579-647
9 <140> CURRENT APPLICATION NUMBER: 10/083,641
10 <141> CURRENT FILING DATE: 2002-02-27
12 <150> PRIOR APPLICATION NUMBER: 60/271,436
13 <151> PRIOR FILING DATE: 2001-02-27
15 <160> NUMBER OF SEQ ID NOS: 17
17 <170> SOFTWARE: PatentIn Ver. 2.1
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 15
21 <212> TYPE: PRT
22 <213> ORGANISM: Artificial Sequence
24 <220> FEATURE:
25 <223> OTHER INFORMATION: Description of Artificial Sequence: Endogenous kinase
26     copurifies with SMPP-1M
28 <400> SEQUENCE: 1
29 Lys Lys Lys Arg Gln Ser Arg Arg Ser Thr Gln Gly Val Thr Leu
30   1             5             10             15
33 <210> SEQ ID NO: 2
34 <211> LENGTH: 13
35 <212> TYPE: PRT
36 <213> ORGANISM: Artificial Sequence
38 <220> FEATURE:
39 <223> OTHER INFORMATION: Description of Artificial Sequence: human pDAPK3
41 <400> SEQUENCE: 2
42 Met Gly Glu Glu Leu Gly Ser Gly Gln Phe Ala Ile Val
43   1             5             10
46 <210> SEQ ID NO: 3
47 <211> LENGTH: 320
48 <212> TYPE: PRT
49 <213> ORGANISM: Artificial Sequence
51 <220> FEATURE:
52 <223> OTHER INFORMATION: Description of Artificial Sequence: ZIP Kinase
54 <400> SEQUENCE: 3
55 Met Ser Thr Phe Arg Gln Glu Asp Val Glu Asp His Tyr Glu Met Gly
56   1             5             10             15
58 Glu Glu Leu Gly Ser Gly Gln Phe Ala Ile Val Arg Lys Cys Arg Gln
59             20             25             30
61 Lys Gly Thr Gly Lys Glu Tyr Ala Ala Lys Phe Ile Lys Lys Arg Arg
62             35             40             45
64 Leu Pro Ser Ser Arg Arg Gly Val Ser Arg Glu Glu Ile Glu Arg Glu
65             50             55             60

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/083,641

DATE: 07/09/2002

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Input Set : A:\Sequence Listing.txt

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67 Val Asn Ile Leu Arg Glu Ile Arg His Pro Asn Ile Ile Thr Leu His
68 65 70 75 80
70 Asp Ile Phe Glu Asn Lys Thr Asp Val Val Leu Ile Leu Glu Leu Val
71 85 90 95
73 Ser Gly Gly Glu Leu Phe Asp Phe Leu Ala Glu Lys Glu Ser Leu Thr
74 100 105 110
76 Glu Asp Glu Ala Thr Gln Phe Leu Lys Gln Ile Leu Asp Gly Val His
77 115 120 125
79 Tyr Leu His Ser Lys Arg Ile Ala His Phe Asp Leu Lys Pro Glu Asn
80 130 135 140
82 Ile Met Leu Leu Asp Lys Asn Val Pro Asn Pro Arg Ile Lys Leu Ile
83 145 150 155 160
85 Asp Phe Gly Ile Ala His Lys Ile Glu Ala Gly Asn Glu Phe Lys Asn
86 165 170 175
88 Ile Phe Gly Thr Pro Glu Phe Val Ala Pro Glu Ile Val Asn Tyr Glu
89 180 185 190
91 Pro Leu Gly Leu Glu Ala Asp Met Trp Ser Ile Gly Val Ile Thr Tyr
92 195 200 205
94 Ile Leu Leu Ser Gly Ala Ser Pro Phe Leu Gly Glu Thr Lys Gln Glu
95 210 215 220
97 Thr Leu Thr Asn Ile Ser Ala Val Asn Tyr Asp Phe Asp Glu Glu Tyr
98 225 230 235 240
100 Phe Ser Ser Thr Ser Glu Leu Ala Lys Asp Phe Ile Arg Arg Leu Leu
101 245 250 255
103 Val Lys Asp Pro Lys Arg Arg Met Thr Ile Ala Gln Ser Leu Glu His
104 260 265 270
106 Ser Trp Ile Lys Val Arg Arg Arg Glu Asp Gly Ala Arg Lys Pro Glu
107 275 280 285
109 Arg Arg Arg Leu Arg Ala Ala Arg Leu Arg Glu Tyr Ser Leu Lys Ser
110 290 295 300
112 His Ser Ser Met Pro Arg Asn Thr Ser Tyr Ala Ser Phe Glu Arg Phe
113 305 310 315 320

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119 <210> SEQ ID NO: 4

120 <211> LENGTH: 13

121 <212> TYPE: PRT

122 <213> ORGANISM: Artificial Sequence

124 <220> FEATURE:

125 <223> OTHER INFORMATION: Description of Artificial Sequence: rat DAP-like kinase

127 <220> FEATURE:

128 <221> NAME/KEY: Unsure

129 <222> LOCATION: (6), (10) *Xaa is at location 9. Arg is at location 10.*

130 <223> OTHER INFORMATION: Xaa can be any amino acid

132 <400> SEQUENCE: 4

W--> 133 Met Leu Leu Asp Lys Xaa Ile Phe Xaa Arg Pro Ile Gln

134 1 5 10

137 <210> SEQ ID NO: 5

138 <211> LENGTH: 13

139 <212> TYPE: PRT

140 <213> ORGANISM: Artificial Sequence

RAW SEQUENCE LISTING

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Input Set : A:\Sequence Listing.txt

Output Set: N:\CRF3\07092002\J083641.raw

```

142 <220> FEATURE:
143 <223> OTHER INFORMATION: Description of Artificial Sequence: D-glycerate
dehydrogenase
145 <220> FEATURE:
146 <221> NAME/KEY: Unsure
147 <222> LOCATION: (8), (10), (11) and (13)
148 <223> OTHER INFORMATION: Xaa can be any amino acid
150 <400> SEQUENCE: 5
W--> 151 Met Thr Ile Ala Gln Asn Leu Xaa Tyr Xaa Xaa Ile Xaa
152      1              5              10
155 <210> SEQ ID NO: 6
156 <211> LENGTH: 1093
157 <212> TYPE: DNA
158 <213> ORGANISM: Artificial Sequence
160 <220> FEATURE:
161 <223> OTHER INFORMATION: Description of Artificial Sequence: Putative nucleotide
162      sequence of smooth muscle MYPT-Kinase
164 <220> FEATURE:
165 <221> NAME/KEY: Unsure
166 <222> LOCATION: (2), (7), (37), (39), (1056), (1081) and (1092)
167 <223> OTHER INFORMATION: N can be A, C, G or T
169 <400> SEQUENCE: 6
W--> 170 gntatgnata tcggtttaat cggccggagc tcgccnncng ggcagctgga ctccctctca 60
171 qacctccttc tttctcgccc tcagcaaggg attaacctca cttgactgtt cttgggtccc 120
172 cgggtgccgg ccagcgctct ctcctcaag gcaatcccca agtgtctgtc atgaggtctt 180
173 ttgggcagtt ctgttggtgt gggaaacctg ggaacagatg cacagaggct ggggtacaga 240
174 qtctgcctt cctctgggtc tgcagcgctt agctgttctt tccccacag cggccagttc 300
175 gccatcgctg caagtgccca gcagaagggc accggcatgg agtacgcggc caagttcata 360
176 aagaagcggc gcctgcgctc cagccggcgc ggtgtgagcc gtgaggagat cgagcgcgag 420
177 gtgagcatcc tgcgcgagat ccgccacccc aacatcatca cgtgcacga tgtgttcgag 480
178 aacaagacag atgtggtgct gatcttgagg ctggtgtccg gcggcgaaact tttcgacttt 540
179 ctggctgaga aggatcactg acagaggatg aggccacgca gttcctcaag cagatcctgg 600
180 acggtgtcca ctacctgcac tccaagcgca tcgcgcactt tgacctgaag ccggagaaca 660
181 tcatgttgct ggacaagcat gcagccagcc cagcatttaa gtcctcgac tttggcatcg 720
182 cgcacaggat cgaggccggg agcgagttca agaactctt tggcacgcca gagttogtcg 780
183 gtgaggggca ggtgtgggca ccaccgata ggttagattt tgcacggcct tggcctgacc 840
184 tgctcaaca atcctgtctt ccacagcccc tgagattgta aactatgaac cacttggctt 900
185 ggaagctgat atgtggagca tcggcgctat cacctacatc ctgtgagtgc ctgagatggg 960
186 caggggcctc agactgtacc tgetagaggc ccagggatca gggctggcac ctctgcaaac 1020
W--> 187 tgcaaact ggggtgaga gatgtcctg ggaacnctgg atatgcctgg gccccacaa 1080
W--> 188 ngtaggacca tnc                                     1093
191 <210> SEQ ID NO: 7
192 <211> LENGTH: 34
193 <212> TYPE: PRT
194 <213> ORGANISM: Artificial Sequence
196 <220> FEATURE:
197 <223> OTHER INFORMATION: Description of Artificial Sequence: Deduced amino acid
sequence of rat
198      aorta smooth muscle MYPT-kinase
200 <220> FEATURE:
201 <221> NAME/KEY: Unsure

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RAW SEQUENCE LISTING

DATE: 07/09/2002

PATENT APPLICATION: US/10/083,641

TIME: 14:04:28

Input Set : A:\Sequence Listing.txt

Output Set: N:\CRF3\07092002\J083641.raw

202 <222> LOCATION: (1), (3) and (13)
 203 <223> OTHER INFORMATION: Xaa can be any amino acid
 205 <400> SEQUENCE: 7
 206 Xaa Met Xaa Ile Gly Leu Ile Gly Arg Ser Ser Pro Xaa Gly Gln Leu
 207 1 5 10 15
 209 Asp Ser Leu Ser Asp Leu Leu Leu Ser Arg Pro Gln His Gly Ile Asn
 210 20 25 30
 212 Leu Thr
 216 <210> SEQ ID NO: 8
 217 <211> LENGTH: 22
 218 <212> TYPE: PRT
 219 <213> ORGANISM: Artificial Sequence
 221 <220> FEATURE:
 222 <223> OTHER INFORMATION: Description of Artificial Sequence: Deduced amino acid
 sequence of rat
 223 aorta smooth muscle MYPT-kinase
 225 <400> SEQUENCE: 8
 226 Leu Phe Leu Gly Pro Arg Cys Arg Ala Ser Val Leu Ser Leu Lys Ala
 227 1 5 10 15
 229 Ile Pro Lys Cys Leu Ser
 230 20
 233 <210> SEQ ID NO: 9
 234 <211> LENGTH: 125
 235 <212> TYPE: PRT
 236 <213> ORGANISM: Artificial Sequence
 238 <220> FEATURE:
 239 <223> OTHER INFORMATION: Description of Artificial Sequence: Deduced amino acid
 sequence of rat
 240 aorta smooth muscle MYPT-kinase
 242 <400> SEQUENCE: 9
 243 Gly Ser Leu Gly Ser Ser Val Val Val Gly Asn Leu Gly Thr Asp Ala
 244 1 5 10 15
 246 Gln Arg Leu Gly Tyr Arg Val Leu Pro Ser Ser Gly Ser Ala Ala Leu
 247 20 25 30
 249 Ser Cys Ser Phe Pro His Ser Gly Phe Ala Ile Val Arg Lys Cys Lys
 250 35 40 45
 252 Gly Thr Gly Met Glu Tyr Ala Ala Lys Phe Ile Lys Lys Arg Arg Leu
 253 50 55 60
 255 Pro Ser Ser Arg Arg Gly Val Ser Arg Glu Glu Ile Glu Arg Glu Val
 256 65 70 75 80
 258 Ser Ile Leu Arg Glu Ile Arg His Pro Asn Ile Ile Thr Leu His Asp
 259 85 90 95
 261 Val Phe Glu Asn Lys Thr Asp Val Val Leu Ile Leu Glu Leu Val Ser
 262 100 105 110
 264 Gly Gly Glu Leu Phe Asp Phe Leu Ala Glu Lys Asp His
 265 115 120 125
 268 <210> SEQ ID NO: 10
 269 <211> LENGTH: 28
 270 <212> TYPE: PRT
 271 <213> ORGANISM: Artificial Sequence
 273 <220> FEATURE:

RAW SEQUENCE LISTING

DATE: 07/09/2002

PATENT APPLICATION: US/10/083,641

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Input Set : A:\Sequence Listing.txt

Output Set: N:\CRF3\07092002\J083641.raw

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274 <223> OTHER INFORMATION: Description of Artificial Sequence: Deduced amino
275      acid sequence of rat aorta smooth muscle
276      MYPT-kinase
278 <400> SEQUENCE: 10
279 Gln Arg Met Arg Pro Arg Ser Ser Ser Ser Arg Ser Trp Thr Val Ser
280   1           5           10           15
282 Thr Thr Cys Thr Pro Ser Ala Ser Arg Thr Leu Thr
283   20           25
286 <210> SEQ ID NO: 11
287 <211> LENGTH: 55
288 <212> TYPE: PRT
289 <213> ORGANISM: Artificial Sequence
291 <220> FEATURE:
292 <223> OTHER INFORMATION: Description of Artificial Sequence: Deduced amino
293      acid sequence of rat aorta smooth muscle
294      MYPT-kinase
296 <400> SEQUENCE: 11
297 Ser Arg Arg Thr Ser Cys Cys Trp Thr Ser Met Gln Pro Ala His Ala
298   1           5           10           15
300 Leu Ser Ser Ser Thr Leu Ala Ser Arg Thr Gly Ser Arg Pro Val Ala
301   20           25           30
303 Ser Ser Arg Thr Ser Leu Ala Arg Gln Ser Ser Ser Val Arg Gly Arg
304   35           40           45
306 Cys Gly His His Pro Ile Gly
307   50           55
310 <210> SEQ ID NO: 12
311 <211> LENGTH: 18
312 <212> TYPE: PRT
313 <213> ORGANISM: Artificial Sequence
315 <220> FEATURE:
316 <223> OTHER INFORMATION: Description of Artificial Sequence: Deduced amino
317      acid sequence of rat aorta smooth muscle
318      MYPT-kinase
320 <400> SEQUENCE: 12
321 Ile Leu His Gly Leu Gly Leu Thr Cys Leu Asn Asn Pro Val Phe His
322   1           5           10           15
324 Ser Pro
328 <210> SEQ ID NO: 13
329 <211> LENGTH: 4
330 <212> TYPE: PRT
331 <213> ORGANISM: Artificial Sequence
333 <220> FEATURE:
334 <223> OTHER INFORMATION: Description of Artificial Sequence: Deduced amino
335      acid sequence of rat aorta smooth muscle
336      MYPT-kinase
338 <400> SEQUENCE: 13
339 Asp Cys Lys Leu
340   1
343 <210> SEQ ID NO: 14

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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/083,641

DATE: 07/09/2002
TIME: 14:04:29

Input Set : A:\Sequence Listing.txt
Output Set: N:\CRF3\07092002\J083641.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:4; Xaa Pos. 6,9
Seq#:5; Xaa Pos. 8,10,11,13
Seq#:6; N Pos. 2,7,37,39,1056,1081,1092
Seq#:7; Xaa Pos. 1,3,13
Seq#:17; Xaa Pos. 15,18